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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/773,605	02/02/2001	Tadahiro Ohmi	SUGI0064	7328	
7590 10/25/2006		EXAMINER			
Joerg-Uwe Szipl			LEUNG, JENNIFER A		
Griffin & Szipl, P.C. Suite PH-1			ART UNIT	PAPER NUMBER	
2300 Ninth Street, South			1764		
Arlington, VA	22204-2320		DATE MAILED: 10/25/2006	DATE MAILED: 10/25/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provided of 50° FR1 1:810°, into event, however, may a reply be timely filled. If INO period for reply is appellided above, the maximum statutory pariods will apply and will expire \$1X, (9) MONTHS from the mailing date of this communication. Failur to reply within the set or exemended period for righty is appelled above, the maximum statutory pariods will apply and will expire \$1X, (9) MONTHS from the mailing date of this communication. Failur to reply within the set or exemed period for righty is appelled above, the maximum statutory pariod will apply and will expire \$1X, (9) MONTHS from the mailing date of this communication, even if strendy filed, may reduce any search pariod will apply and will expire \$1X, (9) MONTHS from the mailing date of this communication, even if strendy filed, may reduce any search pariod will apply any search pariod				<u> </u>				
Examiner Jennifer A. Leung 1764		Application No.	Applicant(s)					
Jannifer A. Leung 1764		09/773,605	OHMI ET AL.					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Repty A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Editeration of time rup be available under the provisions of 37 CFR. 13(6). In no event, however, may reply but interfy field I the Detend for reply is appealed abone, the manerum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to apply which the set or actived pend for reply like yetater, cause the optication to become ABANDONED (SU S. C. § 133). Any reply sectived by the Dotto lister than the mention will by statetic, cause the optication to become ABANDONED (SU S. C. § 133). Any reply wearing by period with the set or actived pend for reply like the set or actived pend for reply like the set or actived pend for reply like the set or active any carried pend from the deplement. Set 150 S. C. S. 133. Any reply sective to the mailing date of this communication. Set 150 S. C. S. 133. Any reply sective the mailing date of this communication. Set 150 S. C. S. 133. Any reply sective the set 150 S. C. S. 133. Any reply sective the set 150 S. C. S. 134. Any reply sective the set 150 S. C. S. 134. Any reply section is FINAL. 20 S. 25	Office Action Summary	Examiner	Art Unit					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Exercitation of time many be available under the promisions of 37 CFR 1.35(a), In or event, however, may a may be timely filled. - If No period to ready is specified above, the maximum shadors paint with supply and will expire the mailing date of this communication. - Failure to exply within the set or extended pariot for reply will, by statute, cause the application to become ARANDONED (85 U.S. C.§ 133). Any rayly received by this Official entire than three invariants after the mailing date of this communication, even if timely filled, may reduce any exemple and them application to become ARANDONED (85 U.S. C.§ 133). Any rayly received by the Official entire than three invariants after the mailing date of this communication, even if timely filled, may reduce any exemple and the maximum shadows and the promote of the communication, even if timely filled, may reduce any exemple and the maximum shadows and the promote and the promote of the communication, even if timely filled, may reduce any exemple and the maximum shadows and the promote of the communication, even if timely filled, may reduce any exemple and the maximum shadows and the promote and the communication. - Status - This action is FINAL. - 2b) This action is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Exparte Quayle, 1935 C.D. 11, 453 O.G. 213. - Disposition of Claims - 4) Claim(s) 1,22,23,25,26,28 and 30-37 is/are pending in the application. - 5) Claim(s) 1,22,23,25,26,28 and 30-37 is/are rejected. - 7) Claim(s) 1,22,23,25,26,28 and 30-37 is/are rejected. - 7) Claim(s) 1,22,23,25,26,28 and 30-37 is/are rejected. - 8) Claim(s) 1,22,23,25,26,28 and 30-37 is/are rejected. - 7) Claim(s) 1,22,23,25,26,28 and 30-37 is/								
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1) Responsive to communication(s) filed on 25 August 2006 and 12 October 2006. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1,22,23,25,26,28 and 30-37 is/are pending in the application. 4a) Of the above claim(s) is/are allowed. 5) Claim(s) 1,22,23,25,26,28 and 30-37 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) 1,22,23,25,26,28 and 30-37 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) is/are objected to by the Examiner. 4Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 10 Notice of Draftsperson's Patent Drawing Review (PTO-948) of Paper Not(s)/Mall Date. 5) Notice of Informal Patent Application	WHICHEVER IS LONGER, FROM THE MAILING ID. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing.	DATE OF THIS COMMUN. 136(a). In no event, however, may a divil apply and will expire SIX (6) MO te, cause the application to become A	ICATION. reply be timely filed NTHS from the mailing date of this commun. BANDONED (35 U.S.C. § 133).					
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DETAILED ACTION

Response to Amendment

- 1. Applicant's amendment submitted on August 25, 2006 has been received and carefully considered. Claims 2-21, 24, 27 and 29 are cancelled. Claims 1, 22, 23, 25, 26, 28 and 30-37 are currently active.
- 2. The declaration under 37 CFR 1.132 filed on August 25, 2006 and the supplemental declaration under 37 CFR 1.132 filed on October 12, 2006 are insufficient to overcome the rejection of claims 23, 25, 26, 30-33, 35 and 36 based upon 35 U.S.C. 112, first paragraph, as set forth in the last Office action. The Examiner's position is further explained in the "Response to Arguments" section below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 23, 25, 26, 30-33, 35 and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 23, it is unclear as to where support may be found for the structural limitation that, "the plate has a maximum thickness exceeding one half of the first distance," (line 25). It is noted that the specification merely sets forth that the plate is "relatively thick"

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(see page 2, lines 12-15). Although Applicants point to FIG. 6 in support of the amendment, Patent Office drawings cannot be relied upon for detail as to disclosure since they are not to scale.

Regarding claim 26, it is unclear as to where support may be found for the structural limitation that, "the first reflector is a thick plate that includes... a maximum thickness exceeding one half of the first distance," (lines 20-22). It is noted that the specification merely sets forth that the plate is "relatively thick" (see page 2, lines 12-15). Although Applicants point to FIG. 6 in support of the amendment, Patent Office drawings cannot be relied upon for detail as to disclosure since they are not to scale.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1, 22, 28, 34 and 37 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,919,056 (hereinafter US '056) in view of Ohmi et al (EP 0 878 443).

Regarding the instant claims 1, 22 and 28, claims 1-10 of U.S. '056 are generally directed toward the two-reflector embodiments shown in FIGs. 1 and 5. U.S. '056 substantially claims each of the elements claimed in the present application, including: a reactor having an upstream gas inlet side, a downstream moisture outlet side, and a catalyst for generating moisture from hydrogen and oxygen (see reference claim 1, lines 2-3 and 23-30); a first reactor structural component (i.e., a reactor structural component on the inlet side; reference claim 1); a second reactor structural component (i.e., a reactor structural component on the outlet side; reference claim 1); a first reflector with a beveled peripheral portion (i.e., an inlet reflector with a tapered portion formed at peripheral edge portions; reference claim 1, lines 15-18 and 31-43); and a second reflector (i.e., an outlet reflector with a tapered portion formed at peripheral edge portions; reference claim 1, lines 19-22 and 31-43); wherein the beveled peripheral portion is such that a distance between each first or second reflector and its respective closest first or second structural component is increasing in a direction towards the outer edge of the reflector (i.e., characteristic of the gap and tapered angle against the flat bottom of a round recession, as claimed in lines 31-43, for describing FIG. 1). Please note that the recited reactor temperatures (e.g., instant claim 1, lines 2-5) and pressures (e.g., instant claim 22) are process limitations that provide no further patentable weight to apparatus claims.

U.S. '056 is silent as to claiming a means for reducing pressure provided on the downstream side of the reactor, wherein the reactor is connected to a process chamber via said

means for reducing pressure. In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate such elements in the apparatus claimed in U.S. '056, on the basis of suitability for the intended use thereof, because the claimed configuration of the elements is conventional, as evidenced by Ohmi et al. In particular, Ohmi et al. (FIG. 45; page 19, line 10 to page 20, line 11) teaches a system employing a moisture generating reactor, wherein a means for reducing pressure (i.e., a filter F3) provided on the downstream side of the reactor 33 and wherein the reactor is connected to a process chamber (i.e., semiconductor manufacturing equipment 40) via said means F3 for reducing pressure.

Regarding claims 34 and 37, although U.S. '056 is silent as to fastening the reflectors to the structural components by means of bolts, it would have been obvious for one of ordinary skill in the art at the time the invention was made to select a suitable fastening means, such as bolts, for fastening the reflectors to the structural components in the claimed apparatus of U.S. '056 because the Examiner takes Official Notice that bolts are well known means for fastening two elements together.

5. Claims 23, 25, 26, 30-33, 35 and 36 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No 7,008,598 (hereinafter US '598) in view of Ohmi et al (EP 0 878 443).

Regarding the instant claims 23, 25, 26 and 30-33, claims 1-20 of U.S. '598 are generally directed to the single-reflector embodiment shown in FIG. 4. U.S. '598 substantially claims each of the elements claimed in the present application, including: a reactor having an upstream gas inlet side, a downstream moisture outlet side and a catalyst for generating moisture from hydrogen and oxygen (reference claim 1, lines 2-3 and 18-25); a first reactor structural

component (a reactor structural component on the inlet side; reference claim 1, line 4); a second reactor structural component (a reactor structural component on the outlet side; reference claim 1, line 5); and a reflector with a beveled peripheral portion (a taper formed on the peripheral edge portion of the reflector; reference claim 1, lines 26-36) and a thickness exceeding one half of the first distance (see reference claim 20, lines 15-19); wherein the beveled peripheral portion is such that a distance between the reflector and the second reactor structural component is increasing in a direction towards the outer edge of the reflector (i.e., characteristic of the gap and tapered angle against the flat bottom of the round recession; see reference claim 1, lines 26-36 and FIG. 4). Please note that the recited reactor temperatures (e.g., instant claim 23, lines 3-6), pressures (e.g., instant claim 25), and rate of moisture generation (e.g., instant claim 33) are process limitations that provide no further patentable weight to apparatus claims.

U.S. '598 is silent as to claiming a means for reducing pressure provided o the downstream side of the reactor, wherein the reactor is connected to a process chamber via said means for reducing pressure. In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to incorporate such elements in the apparatus claimed in U.S. '598, on the basis of suitability for the intended use thereof, because the claimed configuration of the elements is conventional, as evidenced by Ohmi et al. In particular, Ohmi et al. (FIG. 45; page 19, line 10 to page 20, line 11) teaches a system employing a moisture generating reactor, wherein a means for reducing pressure (i.e., a filter F3) provided on the downstream side of the reactor 33 and wherein the reactor is connected to a process chamber (i.e., semiconductor manufacturing equipment 40) via said means F3 for reducing pressure.

Regarding claims 35 and 36, although U.S. '598 is silent as to fastening the reflector to

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the structural component by means of bolts, it would have been obvious for one of ordinary skill in the art at the time the invention was made to select a suitable fastening means, such as bolts, for fastening the reflector to the structural component in the claimed apparatus of U.S. '598 because the Examiner takes Official Notice that bolts are well known means for fastening two elements together.

Response to Arguments

- 6. Applicant's arguments filed August 25, 2006 have been fully considered but they are not persuasive.
- A. Comments regarding the rejection of claims 23, 25, 26, 30-33, 35 and 36 under 35U.S.C. 112, first paragraph.

Applicants argue that the declaration by Mr. Hasegawa overcomes the rejection over new matter by testifying that one of ordinary skill in the art would have reasonably inferred an approximate scale for Figure 6, and hence, an approximate thickness for the reflector plate, given that a scale is provided for Figure 12. The declaration by Mr. Hasegawa further states that, in any event, scale is immaterial to the recited limitation of a plate having a maximum thickness exceeding one half of the first distance, since the limitation pertains to a dimensionless ratio.

The Examiner respectfully disagrees. Firstly, the scale shown in FIG. 12 refers to the radial placement of thermocouples P and P₁-P₅ on the reactor structural component 3 on the outlet side of the moisture generating apparatus. Looking now to Figure 6, the reflector plate is shown as element 22, said element being drawn with a given thickness. Figure 12 is the only figure of Applicants' disclosure that shows any form of a scale. The Examiner maintains that a scale shown for a single figure of the disclosure does not imply that all other figures of the

disclosure are also to scale, absent a specific statement that all figures are to scale.

Secondly, the declaration (under item 4) states that it is Mr. Hasegawa's opinion that a person of ordinary skill in the art, after looking at Figure 6, would appreciate that the reflector 22 had a maximum thickness exceeding one half the distance between supply passage 7 and outlet passage 10. The declaration further sets forth Mr. Hasegawa's calculations of the dimensionless nature of the ratio of thickness of the plate 22 relative to the distance between the two passages 7 and 10 (under items 5 and 6), wherein the ratio is determined from the drawn proportions of the elements in Figure 6. The Examiner, however, maintains that the declaration is not sufficient for overcoming the rejection over new matter because, as stated in MPEP section 2125,

PROPORTIONS OF FEATURES IN A DRAWING ARE NOT EVIDENCE OF ACTUAL PROPORTIONS WHEN DRAWINGS ARE NOT TO SCALE

When the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value. See *Hockerson-*Halberstadt, Inc. v. Avia Group Int 'l, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000) (The disclosure gave no indication that the drawings were drawn to scale. "[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue."). However, the description of the article pictured can be relied on, in combination with the drawings, for what they would reasonably teach one of ordinary skill in the art. In re Wright, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977) ("We disagree with the Solicitor's conclusion, reached by a comparison of the relative dimensions of appellant's and Bauer's drawing figures, that Bauer clearly points to the use of a chime length of roughly 1/2 to 1 inch for a whiskey barrel.' This ignores the fact that Bauer does not disclose that his drawings are to scale. ... However, we agree with the Solicitor that Bauer 's teaching that whiskey losses are influenced by the distance the liquor needs to traverse the pores of the wood' (albeit in reference to the thickness of the barrelhead)" would have suggested the desirability of an increased chime length to one of ordinary skill in the art bent on further reducing whiskey losses." 569 F.2d at 1127, 193 USPQ at 335-36.)

B. Comments regarding the rejection of claims 1, 22, 28, 34 and 37 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,919,056 (hereinafter US '056) in view of Ohmi et al (EP 0 878 443)

Beginning at the bottom of page 13, Applicants have provided their arguments against the obvious-type double patenting rejection in the form of Tables I and II. Therefore, the Examiner will address these tables, and in particular, the **bolded** entries of the tables (which indicate various differences between the claims of the instant application and the claims of US '056).

For US '056:

[No requirement that the reactor generates moisture at a temperature of no higher than 450 °C]

This is not found persuasive because the temperature of the catalytic reaction is considered a process limitation or intended use, which adds no patentable weight in apparatus claims.

[No means for reducing pressure as conceded by Examiner]

Applicants argue that the filter F3 shown in Figure 45 of Ohmi '443 differs from the means for reducing pressure as claimed because Ohmi '443 does not state that the filter is of a kind that may operate to reduce pressure (see also page 19 of the response). The Examiner respectfully disagrees. As specifically defined in Applicants' specification (see page 12, lines 9-15), said means may comprise "any means that has a squeezing mechanism and permits adjustment of pressure or produces pressure loss can be used as pressure reducing means RM, for example, nozzles, Venturi tubes, capillaries, and filters." Applicants have failed to structurally differentiate between the filter taught by Ohmi '443 and the filters defined in the instant specification.

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[No requirement that the inlet reflector and the outlet reflector be identical flat plates symmetrically disposed in the interior space]

This is not found persuasive. It has been held that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in the application defines an obvious variation of an invention claimed in the patent. In re Vogel, 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970). The court in Vogel recognized "that it is most difficult, if not meaningless, to try to say what is or is not an obvious variation of a claim," but that one can judge whether or not the invention claimed in an application is an obvious variation of an embodiment disclosed in the patent which provides support for the patent claim. According to the court, one must first "determine how much of the patent disclosure pertains to the invention claimed in the patent" because only "[t]his portion of the specification supports the patent claims and may be considered." The court pointed out that "this use of the disclosure is not in contravention of the cases forbidding its use as prior art, nor is it applying the patent as a reference under 35 U.S.C. 103, since only the disclosure of the invention claimed in the patent may be examined." In the instant case, the "inlet reflector" and the "outlet reflector" claimed by US '056 clearly defines the identical and symmetrically disposed reflectors 5 and 6, respectively, of the invention (see US '056, FIG. 1 and FIG. 5). In any event, it has been held that changes in size involve only ordinary skill in the art. In re Rose, 220 F.2d 459, 463, 105 USPQ 237, 240 (CCPA 1955), and where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, In re

Aller, 105 USPQ 233.

[No process chamber]

The Examiner directs Applicants to the process chamber (i.e., semiconductor manufacturing equipment 40) taught by Ohmi '443.

For 09/773,605:

[No requirement that the first and second reactor structural components are joined together by welding]

[No round recession]

[No gap required between the first reflector and the first reactor structural component and between the second reflector and the second reactor structural component]

[This limitation is not present so this apparatus may include a filter in the interior space]

None of the entries above are found persuasive because the instant claims are broader than the claims of US '056 with respect to these structural aspects.

To further establish the case for obvious-type double patenting, the Examiner directs Applicants to FIG. 5 of the instant application and to FIG. 1 of US '056. The invention being defined by claims 1, 22, 28, 34 and 37 of the instant application is essentially the embodiment shown in FIG. 5 of 09/773,605. The invention being defined by claims 1-10 of US '056 is essentially the embodiment shown in FIG. 1 of US '056. A comparison of the figures clearly shows that essentially the same invention is being defined by the claims of both the instant application and US '056. As stated above, it has been held that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of

whether a claim in the application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970).

C. Comments regarding the rejection of claims 23, 25, 26, 30-33, 35 and 36 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No 7,008,598 (hereinafter US '598) in view of Ohmi et al (EP 0 878 443)

Beginning at the bottom of page 19, Applicants have provided their arguments against the obvious-type double patenting rejection in the form of Tables III-VIII. Therefore, the Examiner will address these tables, and in particular, the **bolded** entries of the tables (which indicate various differences between the claims of the instant application and the claims of US '598).

For US '598:

[No requirement that the reactor generates moisture at a temperature of no higher than 450 °C]

This is not found persuasive because the temperature of the catalytic reaction is considered a process limitation or intended use, which adds no further patentable weight in apparatus claims.

[No means for reducing pressure as conceded by Examiner]

Applicants argue that the filter F3 shown in Figure 45 of Ohmi '443 differs from the means for reducing pressure as claimed because Ohmi '443 does not state that the filter is of a kind that may operate to reduce pressure (see also page 19 of the response). The Examiner respectfully disagrees. As specifically defined in Applicants' specification (see page 12, lines 9-15), said means may comprise "any means that has a squeezing mechanism and permits adjustment of pressure or produces pressure loss can be used as

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pressure reducing means RM, for example, nozzles, Venturi tubes, capillaries, and filters." Applicants have failed to structurally differentiate between the filter taught by Ohmi '443 and the filters defined in the instant specification.

[No requirement that there be a first distance separating a material gas supply passage and a moisture outlet passage]

This is not found persuasive because the "distance" is inherent of the claimed apparatus of US '598, given that "an interior space is formed within the reactor structural component on the inlet side and the reactor structural component on the outlet side disposed opposite to each other..." (e.g., ref. claim 20).

[No requirement that the reflector be a thick plate]

The Examiner directs Applicants to claim 20, wherein the claimed reflector has a "thickness of more than about ½ a thickness of the interior space".

[No maximum thickness defined for the reflector]

This is not found persuasive because a maximum thickness is an inherent feature of any element having a thickness.

[No process chamber]

The Examiner directs Applicants to the process chamber (i.e., semiconductor manufacturing equipment 40) taught by Ohmi '443.

For 09/773,605:

[No requirement that the first and second reactor structural components are joined together by welding]

[No round recession]

[No gap required between the reflector and the inside wall of the reactor structural component on the outlet side]

[This limitation is not present so this apparatus may include a filter in the interior space]
[There is no material gas mixing and feeding unit]

None of the above entries are found persuasive because the instant claims are broader than the claims of US '598 with respect to these structural aspects.

To further establish the case for obvious-type double patenting, the Examiner directs Applicants to FIG. 6 of the instant application and to FIG. 4 of US '598. The invention being defined by claims 23, 25, 26, 30-33, 35 and 36 of the instant application is essentially the embodiment shown in FIG. 6 of 09/773,605. The invention being defined by claims 1-20 of US '598 is essentially the embodiment shown in FIG. 4 of US '598. A comparison of the figures clearly shows that essentially the same invention is being defined by the claims of both the instant application and of US '598. As stated above, it has been held that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in the application defines an obvious variation of an invention claimed in the patent. In re Vogel, 422 F.2d 438, 441-42, 164 USPQ 619, 622 (CCPA 1970).

D. Comments regarding the Examiner's use of Official Notice

Applicants (beginning at the bottom of page 31) argue that the use of bolts is not well known. In support of this assertion, the Examiner has provided the reference to Hill (US

5,592,521), which evidences that it is well known that bolts may be used as an alternative to welding for fastening two elements together (see column 5, lines 54-62; see also screw connections 32, 33 in FIG. 3 and under column 8, lines 43-68). The bolts of Applicant (i.e., element 13; FIG. 4) are essentially screw connections, as show by the drawn threads.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

* * *

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Leung whose telephone number is (571) 272-1449. The examiner can normally be reached on 9:30 am - 5:30 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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